

Figure 2

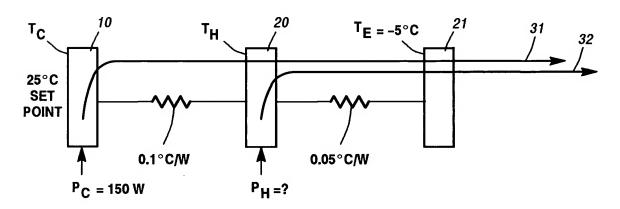


Figure 3

eq. 1
$$\rightarrow$$
 T_C - T_E = P_C $\left[\theta(C-H) + \theta(H-E)\right] + P_H \left[\theta(H-E)\right]$
eq. 2 \rightarrow 25 - (-5) = 150 (0.1 + 0.05) + P_H (0.05)
eq. 3 \rightarrow 30 = 22.5 + 0.05 P_H
eq. 4 \rightarrow P_H = 150 watts

Figure 4

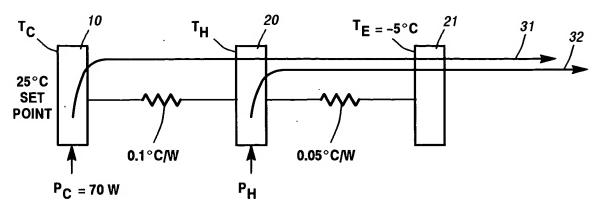


Figure 5

eg.
$$10 \rightarrow 25$$
 – (–5) = 70 (0.1 + 0.05) + P_H (0.05)

eg.
$$11 \rightarrow 30 = 10.5 + 0.05 P_{H}$$

eg. 12
$$\rightarrow$$
 P_H = 390 watts \leftrightarrow too big

Figure 6

eg. 13
$$\rightarrow$$
 CONTROL CKT 27 SETS T_E = + 7°C

eg.
$$14 \rightarrow 25 - (+7) = 70 (0.1 + 0.05) + P_H (0.05)$$

eg. 15
$$\rightarrow$$
 18 = 10.5 + 0.05 P_H

eg. 16
$$\rightarrow$$
 P_H = 150 watts

Figure 7

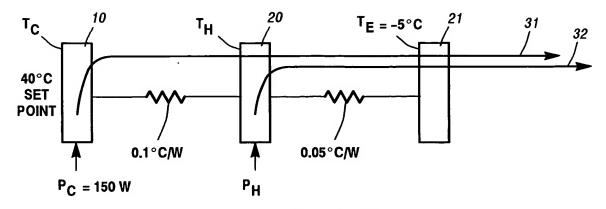


Figure 8

eg. 20
$$\rightarrow$$
 40 - (-5) = 150 (0.1 + 0.05) + P_H (0.05)

eg.
$$21 \rightarrow 45 = 22.5 + 0.05 P_H$$

eg. 22
$$\rightarrow$$
 P_H = 450 watts \leftrightarrow too big

Figure 9

eg. 23
$$\rightarrow$$
 CONTROL CKT 27 SETS T_E = + 10°C

eg.
$$24 \rightarrow 40 - (10) = 150 (0.1 + 0.05) + P_H (0.05)$$

eg.
$$25 \rightarrow 30 = 22.5 + 0.05 P_{H}$$

eg. 26
$$\rightarrow$$
 P_H = 150 watts

Figure 10

